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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/673,438  | 09/30/2003  | Jonathan A. Rowley   | P-5645P1            | 2613             |
| 46851   | 7590        | 03/16/2006           | EXAMINER            |                  |
| DAVID W. HIGHET<br>BECTON, DICKINSON AND COMPANY<br>1 BECTON DRIVE, MC110<br>FRANKLIN LAKES, NJ 07417 |             |                      | NAFF, DAVID M       |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 1651                |                  |
| DATE MAILED: 03/16/2006   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/673,438

Applicant(s)

ROWLEY ET AL.

Examiner

David M. Naff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-27 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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***Election/Restrictions***

Claims in the application are 1-27.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- 5 I. Claims 1-8, drawn to a method of making a cell culture environment, classified in class 435, subclass 174.
- II. Claims 9-18, drawn to a cell culture environment and array comprised by the environment, classified in class 435, subclass 325.
- 10 III. Claim 19, drawn to a method of culturing cells, classified in class 435, subclass 395.
- IV. Claims 20-24, drawn to a method of assaying cellular function, classified in class 435, subclass 29.
- V. Claim 25, drawn to a method of making a cell-based  
15 transplant, classified in class 424, subclass 423.
- VI. Claims 26 and 27, drawn to a kit, classified in class 435, subclass 283.1.

The inventions are independent or distinct, each from the other because:

- 20 Inventions I and II and VI are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process  
25 (MPEP § 806.05(f)). In the instant case, the cell culture environment

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of invention II and kit of invention VI can be prepared by a method materially different from the method of invention I. The cell culture environment can be produced by not requiring a separate step of forming pores after crosslinking to form a hydrogel as required by invention I such as by forming pores during crosslinking to form the hydrogel. The kit can be produced without crosslinking and without a biologically active molecule non-covalently incorporated into the porous hydrogel as required by invention I.

Inventions II and III, IV and V are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the cell culture environment of invention II can be used in a materially different process than culturing cells as required by invention III, assaying cellular function as required by invention IV and producing a cell-based *in vivo* transplant as required by invention V. The cell culture environment of invention II can be used to deliver *in vitro* or *in vivo* a biologically active molecule other than cells without cells being seeded on the cell culture environment as required by inventions III, IV and V.

The methods of inventions I, III, IV and V are distinct from each other since each can be carried without any other. The making a cell culture environment as required by invention I method can be performed

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without culturing cells as required by invention III, without assaying  
as required by invention IV and without producing a transplant as  
required by invention V. Culturing cells of invention III can be  
performed without forming pores after crosslinking as in invention I,  
5 without assaying as in invention IV and without forming a transplant  
as in invention V. Assaying of invention IV can be performed without  
pore formation after crosslinking as in invention I, without using  
conditions for culturing cells as would be required by invention III  
and without forming a transplant as required by invention V. Forming  
10 a transplant as required by invention V can be performed without pore  
formation after crosslinking as in invention I, without using  
conditions that do not form a transplant as encompassed by invention  
III and without assaying as required by invention IV.

The cell culture environment of invention II and the kit of  
15 invention VI can each be used without the other. The cell culture  
environment does not have to be in the form of a kit, and the kit does  
not require the biologically active molecule to be non-covalently  
attached to the porous hydrogel.

Examining inventions I-VI together will be a serious burden due  
20 to different searches and considerations for applying prior art  
required due to differences in scope and content of the claims of the  
different inventions.

Because these inventions are independent or distinct for the  
reasons given above and have acquired a separate status in the art in

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view of their different classification, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be  
5 examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically  
10 point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or  
15 species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

20 Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a

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request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5 The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

10 In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 20 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a** 25 **loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

### 30 **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Naff whose telephone number is 571-272-0920. The examiner can normally be reached on Monday-Friday 9:30-6:00.

35 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David M. Naff  
Primary Examiner  
Art Unit 1651

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DMN  
3/14/06